Experimental Website Helps Teens Eat More Veggies

U mart, cool, and sometimes funny, the animated cartoon characters "Darius," "Kyle," "Lynn," and "Maria" were created to help adolescents make better food choices and to be less sedentary. The energetic, likeable cartoon teens are an exclusive feature of "Teen Choice: Food and Fitness," an experimental, science-based website co-developed and evaluated by nutrition and behavioral science researchers Karen Cullen and Debbe Thompson; Richard Buday and his Houston, Texas, team of animators, scriptwriters-and more—at Archimage, Inc.; along with other research colleagues and hundreds of interested 'tween and teen volunteers

To create an engaging, teen-friendly site, the scientists first sought the input of about 100 young volunteers, who shared their ideas about how to make the site easy to navigate, informative, and relevant to real-world obstacles they had encountered in trying to develop better eating habits and to become more physically active.

In a follow-up study, another 400 teen volunteers evaluated the new site. They were asked to visit this Web venue at least once a week for 8 weeks and to peruse the handy information about food and fitness—including easy recipes in the "Teen Kitchen," and a simplified "Healthy Eating Calculator" for customizing food-group and physical-activity recommendations.

In addition, each volunteer was asked to set a personal goal for becoming more nutrition savvy or more physically active, and to revisit the goal—and their progress towards attaining it—every week.

Importantly, the log-on rate for volunteers averaged an impressive 75 percent, a level of participation that's regarded as "high" for education-focused Internet sites. One volunteer said the site "wasn't like those boring online textbooks or anything. But it still got the job done, which I liked. And it didn't waste time with telling us stuff we already knew."

The researchers also found that more of the volunteers who had access to the site's interactive options reported eating three or more servings of veggies in the past week than did volunteers whose access didn't include the interactive features. Those features included the cartoon videos, interactive goal-setting and problem-solving aids, and a blog.

The teens' move toward healthier food choices is important: According to Cullen, getting kids to eat more veggies is apparently more difficult than getting them to The Children's Nutrition Research Center is a joint venture of USDA's Agricultural Research Service, Baylor College of Medicine, and the Texas Children's Hospital. The "Teen Choice" studies are part of the nutrition center's ongoing research to develop effective strategies for preventing childhood obesity. Currently, more than 30 percent of America's young are overweight or obese.—By Marcia Wood, ARS.

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Scientists evaluating the "Teen Choice: Food and Fitness" nutrition-education website found that volunteers who had access to science-based videos featuring cartoon personalities "Lynn," "Kyle," "Maria," and "Darius" (shown here, left to right) reported eating more veggies than did other volunteers in the same study.

eat more servings of fruit, for instance.

Cullen and Thompson, both based in Houston at the Children's Nutrition Research Center, want to make the site publicly available. In the meantime, they've documented the development and evaluation of the site in peer-reviewed scientific articles that were published in 2012 in the *Journal of Medical Internet Research* and in 2013 in *Health Education Journal*.

program (#107) described at www.nps. ars.usda.gov.

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